



Venn Diagrams. Eye colour vs. Internet access

How to Get a Random Sample from CensusAtSchool

Go to the CensusAtSchool [Random Sampler](#) to download a sample.X

Reference year: (select year) **Sample size:** At least 100 students

Select questions: Eye colour, Internet access at home

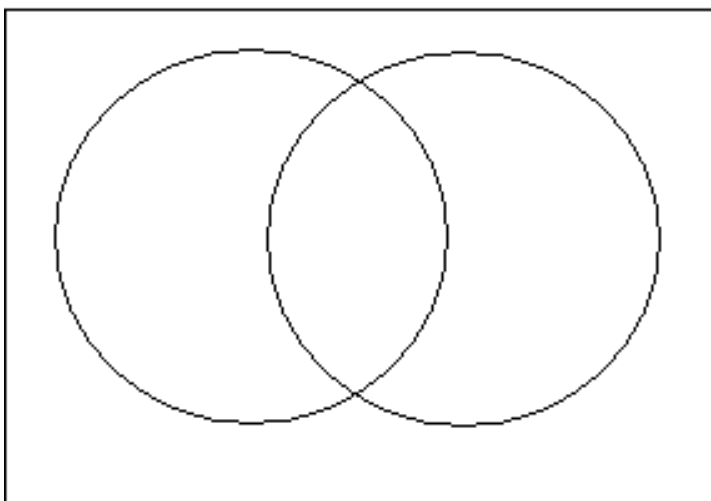
Location: Select location

Year level: (select a range of year levels)

To protect privacy there is a rule built into the sampler that the requested sample size cannot exceed 10% entered.

Riley thinks that brown eyed people are more likely to have broadband internet access than people with blue eyes.

He uses a random sample of one hundred students who have either blue or brown eyes from CensusAtSchool to construct this Venn Diagram.



Task:

Investigate whether Riley is correct or not.

1. In your CensusAtSchool random sample, find the question about eye colour, and the question about internet access at home.

You are only interested in people with blue or brown eyes. Go down the list of eye colour, and tally the frequency of broadband access or not, in the table below.

You want a sample of twenty blue eyed students and twenty brown eyed students.

	Blue eyes		Brown eyes		Total
	Tally	Count	Tally	Count	
Broadband access					

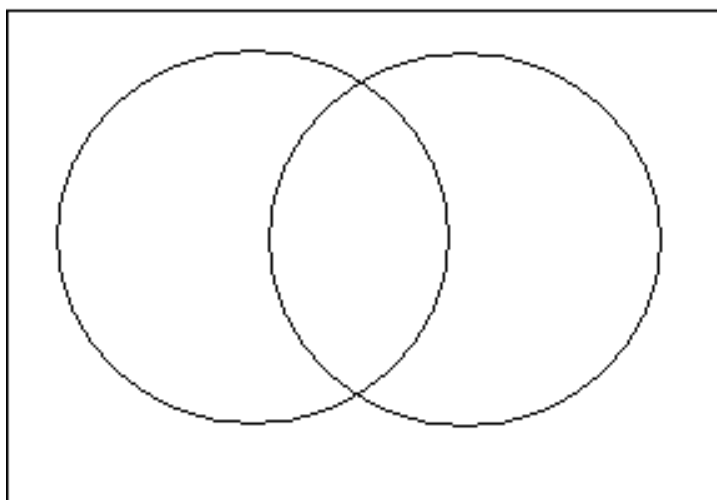
CensusAtSchool Random Sampler <http://www.cas.abs.gov.au/cgi-local/cassampler.pl>

Access other similar lessons at <http://www.abs.gov.au/censusatschool>



Not Broadband access					
Total	20		20		

2. Fill in the blank Venn diagram below using your table.

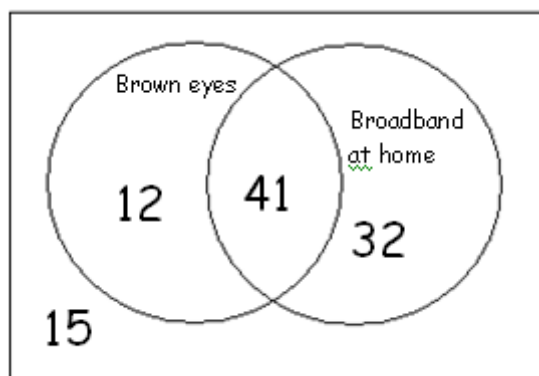


3. Examine your diagram. Do more blue eyed or brown eyed people have broadband internet access at home?

4. Look at Riley's Venn diagram below. Riley's statement is that brown eyed people are more likely to have broadband internet access than people with blue eyes. Based on your findings, is Riley correct?

5. Explain why we cannot make fair comparisons between your and Riley's Venn diagrams.

6. Change your Venn diagram to percentages, to match Riley's. (Hint: Multiply all the numbers by the same whole number)



7. Write a summary paragraph comparing

